

# Tentative First Draft of Table of Contents

- 1) Intro, purpose, and explanation of chapter layout
- 2) Osc theory summary
- 3) Why these measurements are important (Winter)
- 4) Current knowledge of neutrino properties and description of where we may be in 10 years time
  - a) Summary of current parameter knowledge
  - b) Describe experiments that have yet to release results, but will have in 10 years time.
  - c) Scenarios for where we may be in 10 years time
    - i.  $\text{SIN}^2 2\theta_{13} > \sim 0.04$
    - ii.  $\text{SIN}^2 2\theta_{13} > \sim 0.01$
    - iii.  $\text{SIN}^2 2\theta_{13}$  consistent with zero
    - iv. Mass heirarchy measured
    - v. LSND oscillation confirmed by MiniBooNE
    - vi. Some new physics signal

- 5)  $\text{SIN}^2 2\theta_{13} > \sim 0.04$ 
  - a) Nova
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- 6)  $\text{SIN}^2 2\theta_{13} > \sim 0.01$ 
  - a) FeHo
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  - d) ...
- 7)  $\text{SIN}^2 2\theta_{13}$  consistent with zero
  - a) Betabeam
  - b) Neutrino Factory (Geer)
- 8) Other Possibilities
  - a) Mass heirarchy measured
    - i. ....
  - b) LSND oscillation confirmed by MiniBooNE
    - i. Decay at rest source (Van de Water)
    - ii. NUMI numu to nutau & numu disappearance (Bazarko)
    - iii. ....
  - c) Some new physics signal
    - i. ....
- 9) Summary

# Tentative Workshop Schedule for Neutrino Oscillations Working Group

Wed 6 Oct

16:20-17:30 Purpose and Setting the Scene

'Intro and Purpose of WG' Conveners 10 mins

'Oscillations as probes of GUT theory' 20 mins

Discussion 40 mins

Thu 7 Oct

10:30-12:30 Superbeam Experiments I

'Nova and other off axis with PD' Gary Feldman 25 mins

'FeHo' Doug Michael 25 mins

Discussion 70 mins

14:00-15:30 Cross-Section Needs (joint with WG2)

15:50-17:30 Superbeam Experiments II

'Fermilab to China' 20 mins

'Connection with UG Lab' Gina Rameika 20 mins

'Case for a Super Neutrino Beam' Milind Diwan 20 mins

Discussion 40 mins

Fri 8 Oct

10:30-12:30 What If MiniBooNE Confirms LSND  
Oscillations?

'Muon Decay at Rest' Richard Van de Water (LANL) 25 mins

'NUMI numu to nutau' Andrew Bazarko (Princeton) 25 mins

Discussion 70 mins

14:00-15:30 Detectors and Beams (joint with WG2)

15:50-17:30

'Betabeam using the Tevatron' Andreas Jansson 20 mins